

Low Voltage and Class 2

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AC/DC powering of Access Point



This is the AC/DC supply that can be purchased with the Access Point, used to power the AP from an AC outlet.

Is an electrician required to do this?



Yet, this cable has 48V on it

This bill can be interpreted to require an electrician's license for an IT contractor to make this connection in an office

This supply is UL listed as a Class 2 power supply and Limited Power Source



PoE System

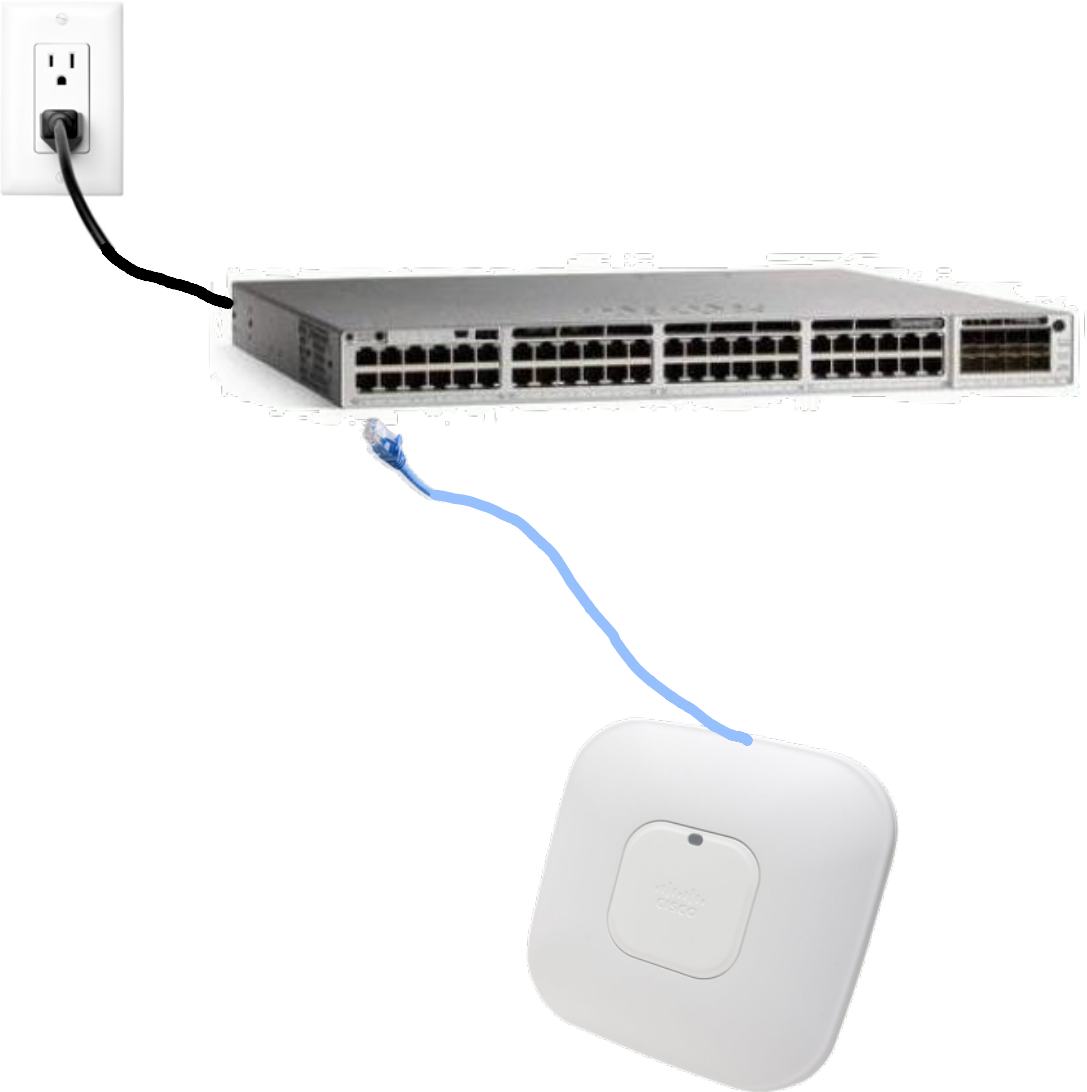


Class 2 Limited Power Supply



Each of these ports is a Class 2 LPS supply

Therefore, these are equivalent



Class 2 and Class 3 Tables from the NEC (AC)

CHAPTER 9

TABLES

Table 11(A) Class 2 and Class 3 Alternating-Current Power Source Limitations

Power Source		Inherently Limited Power Source (Overcurrent Protection Not Required)				Not Inherently Limited Power Source (Overcurrent Protection Required)			
		Class 2		Class 3		Class 2		Class 3	
Source voltage V_{max} (volts) (see Note 1)		0 through 20*	Over 20 and through 30*	Over 30 and through 150	Over 30 and through 100	0 through 20*	Over 20 and through 30*	Over 30 and through 100	Over 100 and through 150
Power limitations VA_{max} (volt-amperes) (see Note 1)		—	—	—	—	250 (see Note 3)	250	250	N.A.
Current limitations I_{max} (amperes) (see Note 1)		8.0	8.0	0.005	$150/V_{max}$	$1000/V_{max}$	$1000/V_{max}$	$1000/V_{max}$	1.0
Maximum overcurrent protection (amperes)		—	—	—	—	5.0	$100/V_{max}$	$100/V_{max}$	1.0
Power source maximum nameplate rating	VA (volt-amperes)	$5.0 \times V_{max}$	100	$0.005 \times V_{max}$	100	$5.0 \times V_{max}$	100	100	100
	Current (amperes)	5.0	$100/V_{max}$	0.005	$100/V_{max}$	5.0	$100/V_{max}$	$100/V_{max}$	$100/V_{max}$

Note: Notes for this table can be found following Table 11 (B).

*Voltage ranges shown are for sinusoidal ac in indoor locations or where wet contact is not likely to occur.

For nonsinusoidal or wet contact conditions, see Note 2.

Class 2 and Class 3 Tables from the NEC (DC)

Table 11(B) Class 2 and Class 3 Direct-Current Power Source Limitations

Power Source		Inherently Limited Power Source (Overcurrent Protection Not Required)				Not Inherently Limited Power Source (Overcurrent Protection Required)				
		Class 2		Class 3		Class 2		Class 3		
Source voltage V_{max} (volts) (see Note 1)		0 through 20*	Over 20 and through 30*	Over 30 and through 60*	Over 60 and through 150	Over 60 and through 100	0 through 20*	Over 20 and through 60*	Over 60 and through 100	Over 100 and through 150
Power limitations VA_{max} (volt-amperes) (see Note 1)		—	—	—	—	—	250 (see Note 3)	250	250	N.A.
Current limitations I_{max} (amperes) (see Note 1)		8.0	8.0	$150/V_{max}$	0.005	$150/V_{max}$	$1000/V_{max}$	$1000/V_{max}$	$1000/V_{max}$	1.0
Maximum overcurrent protection (amperes)		—	—	—	—	—	5.0	$100/V_{max}$	$100/V_{max}$	1.0
Power source maximum nameplate rating	VA (volt-amperes)	$5.0 \times V_{max}$	100	100	$0.005 \times V_{max}$	100	$5.0 \times V_{max}$	100	100	100
	Current (amperes)	5.0	$100/V_{max}$	$100/V_{max}$	0.005	$100/V_{max}$	5.0	$100/V_{max}$	$100/V_{max}$	$100/V_{max}$

*Voltage ranges shown are for continuous dc in indoor locations or where wet contact is not likely to occur.

For interrupted dc or wet contact conditions, see Note 4.

Notes for Table 11(A) and Table 11(B)

1. V_{max} , I_{max} , and VA_{max} are determined with the current-limiting impedance in the circuit (not bypassed) as follows:

V_{max} : Maximum output voltage regardless of load with rated input applied

Cisco's Amendment

Cisco would support the bill as introduced with the following amendment (V) inserted into existing language in 6-303:

(B) THIS SUBTITLE DOES NOT REQUIRE:

...

(3) A PERSON TO HOLD A LICENSE ISSUED BY THE STATE BOARD IF THE PERSON:

...

(V) DESIGNS, INSTALLS, ERECTS, REPAIRS, MAINTAINS, OR ALTERS ANY ELECTRICAL WIRING, FIXTURE, APPLIANCE, APPARATUS, RACEWAY OR CONDUIT THAT IS CLASSIFIED AS CLASS 2 OR CLASS 3 REMOTE-CONTROL, SIGNALING, AND POWER-LIMITED CIRCUITS, AS DEFINED BY THE NATIONAL ELECTRICAL CODE



CISCO